

**REMARKS**

In response to the Restriction Requirement of July 17, 2006, Applicant elected claims 1-78 for examination on the merits. The Examiner has issued a second Restriction Requirement.

Claims 1-34, 36-43, 45-63, 65-74, 76-78, 81, and 83-88 are pending in the instant application.

**Reply to Restriction Requirement**

**(a) Group Restriction:**

Pursuant to 35 U.S.C. § 121, the Examiner required restriction to one of twenty-three inventions.

As a preliminary matter, Applicant notes that the Restriction Requirement placed claim 9 in both Groups I and III and claim 54 in Groups I and IV-XXIII.

Applicant elects *Group I, claims 9-13, 19-26, 54-59, 65-67, 69-74, 76-78, and 85*, with traverse.

Applicant traverses this Restriction Requirement, because Applicant avers that it would not constitute an undue burden on the Examiner to examine the claims of Group I along with the other pending claims of Groups III-XXIII as they are all classified in class 424, subclass 93.21. Accordingly, Applicant respectfully requests that the inventions of Groups I and III-XXIII be examined together.

Applicant notes that the Examiner has stated that claims 1-8, 14-18, 27-34, 36-43, 45-53, 60-63, 83, and 87-88 link the inventions of Groups I and III-XXIII and that upon allowance of the linking claims, the Restriction Requirement as to the linked invention shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application.

**(b) Species Restriction:**

Since Applicant has elected Group I for examination, the Examiner has further required that Applicant elect a single species of a mechanism for disrupting sex-steroid mediated

signaling to the thymus selected from: (1) surgical castration; (2) chemical castration; and (3) administration of one or more pharmaceuticals. Applicant elects "*administration of one or more pharmaceuticals*," with traverse. The claims readable on this election are *claims 1-34, 36-43, 45, 46, 49-63, 65-67, 69-74, 76-78, 83, 85, and 87-88*.

The Examiner required that if Applicant elects "administration of one or more pharmaceuticals," Applicant elects a single species of a pharmaceutical selected from (a) LHRH agonists; (b) LHRH antagonists; (c) anti-LHRH vaccines; (d) anti-androgens; (e) anti-estrogens; (f) SERMs; (g) SARMS; (h) SPRMs; (i) ERDs; (j) aromatase inhibitors; (k) anti-progestogens; (l) dioxalan derivatives; or (m) a specific combination of species a-l. Applicant elects *LHRH agonists*, with traverse. The claims readable on this election are *claims 1-34, 36-43, 45, 46, 49-51, 53-63, 65-67, 69-74, 76-78, 83, 85, and 87-88*.

The Examiner also required that if Applicant elects LHRH agonists, Applicant elects a species recited in claim 51. Applicant elects *leuprolide*, with traverse. The claims readable on this election are *claims 1-34, 36-43, 45, 46, 49-51, 53-63, 65-67, 69-74, 76-78, 83, 85, and 87-88*.

The Examiner further required electing a species of cells from claim 1. Applicant elects *HSC*, with traverse. The claims readable on this election are *claims 1-33, 36-42, 45-63, 65-66, 69-73, 76-78, 83, 85, and 87-88*.

The Examiner required election of a single specific named cytokine species or a single specific named growth factor or a single specific combination of a cytokine and a growth factor recited in claims 61-63. Applicant elects *IL-7*, with traverse. The claims readable on this election are *claims 1-34, 36-43, 45-62, 65-67, 69-74, 76-78, 83, 85, and 87-88*.

Finally, the Examiner further required election of a single species of a polynucleotide expressible in genetically modified cells from (a) nef transcription factor gene; (b) a gene that codes for a ribozyme that cuts HIV tat; (c) a gene that codes for a ribozyme that cuts rev gene; (d) a ribozyme that cuts HIV tat and rev genes; (e) RevM10; (f) HIV-1 rev-response element; (g) CXCR4; and (h) PolyTAR. Applicant elects *a gene that codes for a ribozyme that cuts HIV tat*, with traverse. The claims readable on this election are *claims 1-34, 36-43, 45-57, 60-63, 65-67, 69-74, 76-78, and 83, 85, and 87-88*.

Applicant respectfully traverses the species election requirements made above for the following reasons.

First, according to MPEP § 803.02, if the members of a Markush group are sufficiently few in number or so closely related that a search and examination of the entire claim can be made without serious burden, the Examiner must examine all the members of the Markush group in the claim on the merits, even though they may be directed to independent and distinct inventions. In such a case, the Examiner will not follow the procedure described below and will not require provisional election of a single species. (emphasis added). Thus, the MPEP necessarily requires that the Examiner examine all species in the above claims where the number of species recited are sufficiently few in number. In addition, the recited species are also closely related.

Notwithstanding this fact, Applicant further notes that examination of the recited species in the claims in question would not pose an undue burden on the Patent Office. As such, the Office Action has not provided any indication of an undue burden on the Office to examine the species together.

For the foregoing reasons, Applicant respectfully requests that this Species Election Requirement be reconsidered and withdrawn.

**CONCLUSION**

Claims 1-34, 36-43, 45-63, 65-67, 69-74, 76-78, 81, and 83-88 remain pending in this application.

Applicant petitions for a one-month extension of time to respond to the outstanding Office Action. Please charge the requisite fees to our Deposit Account No. 08-0219.

No additional fees are due in connection with this correspondence. However, if any fees are due, please charge the payments due to our Deposit Account No. 08-0219.

If a telephone interview would advance prosecution of the application, the Examiner is invited to telephone the undersigned at the telephone number given below.

Respectfully submitted,

Dated: June 4, 2007



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